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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,935	12/13/2001	Norikazu Ochiai	01823/LH	2660
1933	7590	02/22/2007	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			KANG, ROBERT N	
220 Fifth Avenue			ART UNIT	PAPER NUMBER
16TH Floor			2625	
NEW YORK, NY 10001-7708				

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/021,935	OCHIAI, NORIKAZU	
Examiner		Art Unit	<i>Mur</i>
Robert N. Kang		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 December 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5,7-11,13-17 and 19-23 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,7-11,13-17 and 19-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Arguments

Regarding the numbering issue raised by applicant on page 12, the numbering is as follows: claims 1, 2, 6, 7, 8, 12, 13, 14, 18, 19, 20, 24 rejected by Corona in view of Microsoft. Claims 3, 4, 5, 9, 10, 11, 15, 16, 17, 21, 22 rejected by Corona/Microsoft in view of Fujita.

Response to Amendment

1. Applicant has amended claims 1, 7, 13, and 19 to include two further limitations.
 - I.) The user identification and page information is printed on the back surface of the sheet **on the edge of the sheet that is first output from a sheet discharge port from which the sheet is discharged**. Corona depicts in FIG. 4 two orientations of outputting sheets, 15a and 16a (col. 7, lines 51-68), wherein 16a the lengthwise dimension is parallel to the feed direction (indicated by the un-numbered arrow between numerals 15 and 15a). It is apparent that in the 16a orientation the sheet is output from top to bottom from output 12. Thus the bottom edge of the sheet is the first to exit the mechanism, and thus the data is printed on the “edge of the sheet that is first output from a sheet discharge port from which the sheet is discharged.”
 - II.) The user identification information is printed **in a reverse direction with respect to a direction of printing on a front surface**. This feature is inherent in all duplex printers. Duplex printers utilize rollers similar to those shown in FIG. 1 of Corona to roll a page to the reverse side for printing. Thus when a page is flipped over in the lengthwise (feed) direction, the top of side A becomes the bottom of side B. Software

algorithms are designed specifically to counter this by printing text “upside down” on the reverse side during a duplex printing operation, so that when the page is flipped horizontally, the text is in the same direction as on the previous side. Therefore, the applicant’s additional amendment removes an improvement of duplex printers to obtain functionality equivalent in every single duplex printer. Thus the limitation is inherently met by Corona. Regardless, rotation or orientation of printed data is not novel or patentable; nor are the motivations for adjusting said orientation, for example, a printer may feed towards the “front” of the printer, and as such it would make sense to invert the data on the back side so that the user walking to the front of the printer does not have to read upside-down text.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1, 7, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corona (US-PAT 5316279) in view of Microsoft Corporation Notepad.

Corona discloses an apparatus and a method of operating the given apparatus for “segregating and identifying separate job sets from a commonly stacked output of plural job sets.” Corona states in column 3, lines 7-10, “modern printers, copiers, fax machines, and workstation terminals are now more and more utilized as shared and/or

integrated components of overall office systems, in which they are cost-effectively shared by plural users, electronically and/or physically." Corona also clarifies in column 3, lines 39-41, that "the term 'printer' as used herein encompasses various copiers, printers, facsimile receivers and various combinations thereof." Therefore, Corona's patent pertains to printers in a networked environment, since a printer can only be "shared electronically" in such an environment; physical sharing of the printer among several users, i.e., physically moving the connector from workstation to workstation and installing printer drivers, is clearly not the inferred intention of Corona's patent. Thus Corona's disclosed image forming apparatus and method is "connected to a network to which a plurality of computers are connected in order to enable communication."

With regards to limitation 1, "a storage section which receives and stores user identification information," Corona states in column 7, lines 33-38, "printer 10 in this system may also print an identifying job banner on the end part 15a of the cover sheet... as shown in FIG 4." The identifying job banner as further described by Corona in column 7, lines 38-44, "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." Since Corona's allowed patent deals specifically with the sorting process of a network printer or other image forming apparatus, he does not expressly include a storage section which receives and stores the user/job identification. However, examiner puts forward the following arguments: 1.) Because the printer as disclosed by Corona functions in a network environment and specifically cites the

existence of user identification data, it is inferred that the user identification data is transmitted across the network and stored in some nonvolatile or volatile memory within the printer. 2.) Printers with nonvolatile or volatile memory for long term or temporary storage of print data and job identifiers are well known in the art at the time of submission of the pending application. 3.) Corona incorporates Knodt (US-PAT 5124731) by reference in his patent; Knodt in Figure 2 discloses a disc 56 for storing data within controller section 2 of the given printing system. Therefore, Corona's patent includes a storage section which "receives and stores user identification information for identifying a user of a computer together with printing information from said printer."

With regards to limitation 2, "a sheet counting section which prepares page information from said printing information," this limitation is met by the aforementioned job identifying banner as described in column 7, lines 38-44, "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." The reception of this job identifying banner data as disclosed in the previous paragraph carries out the same functionality of the "sheet counter"; to "prepare page information from said printing information."

Regarding limitation 3, Corona discloses in figure 1 a control means 100, "for selecting which said sheet supply tray will feed copy sheets for a selected job set," as claimed in claim 1. Furthermore, the controller functions to allow for reverse side printing. Corona discloses in column 10, lines 36-41, "if the job sets are being outputted and stacked facedown, another option is to alternatively or additionally print the banners

15a or 16a on their rear sides so that they will still be visible from the top of (facing up in) the stacking tray."

Corona does not expressly disclose printing user and page information on the back of each printed sheet, presumably because this would essentially double the printing time of a given duplex printer.

Microsoft Notepad, which shipped bundled with Microsoft Windows 95 on 8/24/95, prints the page number on each page discharged from the printer output port so that the page number corresponds with the order of the page in the program. This "feature" is also available as an option in several standard word processing or text editor programs, as the method of printing page numbers is well known in the art; the benefit of this feature is to provide the user with a quick and easy way to verify the number of pages printed without the use of a cover page, though the two are not mutually exclusive..

Corona and Microsoft Corporation Notepad are combinable because they both deal with static text representation in the field of printing.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include in Coronas system, which prints page and user information on the reverse side of banner sheets, a feature to print page and user information on the back of each sheet of corresponding print data as taught by Microsoft Corporation's Notepad application. As stated in item 2, because Corona's invention teaches printing the total page number X, and Microsoft Notepad prints the current page Y, the Corona/Microsoft combination prints "on the back surface of the sheet in Y/X form,

wherein X is a total number of pages in a print job, and Y is a page number of the printed sheet."

The motivation of this modification would be to remove the use of banner pages altogether and allowing the user to easily identify the owner and length of documents output face down from a network printer.

Therefore it would have been obvious to combine Corona with Microsoft Corporation Notepad to obtain the invention as disclosed in claims 1, 13, 7, and 19.

In regards to claims 2 and 14, Corona again does not specifically disclose the controller interpreting settings sent by the user and stored in a setting section to determine whether or not to print user identification information. However, because Corona discloses a system with several different options and orientations for generating banner pages within a single image forming apparatus, it stands to reason that the user sets up these options in a user interface, which is transmitted to the controller 100, as was well known in the art at the time of submission. Furthermore, the patent by Knott (US-PAT 5124731), incorporated by reference in the Corona patent, discloses in figure 15 the operation of the SetCovers block 370 within the controller. Step 402 designates whether or not to print covers at all; these instructions are received by the user through user interface 52 and stored on disk 56, thereby meeting the requirement of "a setting section which stores setting information for setting whether or not to print said page information and said user identification information received from said network." Furthermore, the controller 7 interprets these commands as shown in block 370 to

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output an image with covers as designated by the user input. Corona states in column 5, lines 54-58, "all references cited in this specification, and their references, are incorporated by reference herein where appropriate." Regarding a setting section, the print system of Corona incorporates a SetCovers block for setting up the orientation and frequency of banner pages by reference. Therefore, "the controller section judges whether or not the page information and the user identification are to be printed on the back surface of the sheet based on the setting information stored in the setting section."

Regarding claims 6 and 18, which states "said controller section prints the page information and the user identification information on an edge of the sheet opposite to a sheet discharge port from which the sheet is discharged." Corona discloses in figure 1 a control means 100, "for selecting which said sheet supply tray will feed copy sheets for a selected job set," as claimed in claim 1. Furthermore, the controller functions to allow for reverse side printing. Corona discloses in column 10, lines 36-41, "if the job sets are being outputted and stacked facedown, another option is to alternatively or additionally print the banners 15a or 16a on their rear sides so that they will still be visible from the top of (facing up in) the stacking tray." Therefore, the page information and user identification is printed on the sheet side opposite to the sheet discharge port.

Regarding claims 7 and 19, Corona discloses an apparatus and a method of operating the given apparatus for "segregating and identifying separate job sets from a commonly stacked output of plural job sets." Corona states in column 3, lines 7-10,

"modern printers, copiers, fax machines, and workstation terminals are now more and more utilized as shared and/or integrated components of overall office systems, in which they are cost-effectively shared by plural users, electronically and/or physically." Corona also clarifies in column 3, lines 39-41, that "the term 'printer' as used herein encompasses various copiers, printers, facsimile receivers and various combinations thereof." Therefore, Corona's patent pertains to printers in a networked environment, since a printer can only be "shared electronically" in such an environment; physical sharing of the printer among several users, i.e., physically moving the connector from workstation to workstation and installing printer drivers, is clearly not the inferred intention of Corona's patent. Thus Corona's disclosed image forming apparatus and method is "connected to a network to which a plurality of computers are connected in order to enable communication."

With regards to claims 7 and 19, limitation 1, "a storage section which receives and stores ser identification information," Corona states in column 7, lines 33-38, "printer 10 in this system may also print an identifying job banner on the end part 15a of the cover sheet... as shown in FIG 4." The identifying job banner as further described by Corona in column 7, lines 38-44, "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." Since Corona's allowed patent deals specifically with the sorting process of a network printer or other image forming apparatus, he does not expressly include a storage section which receives and stores the user/job identification.

However, examiner puts forward the following arguments: 1.) Because the printer as disclosed by Corona functions in a network environment and specifically cites the existence of user identification data, it is inferred that the user identification data is transmitted across the network and stored in some nonvolatile or volatile memory within the printer. 2.) Printers with nonvolatile or volatile memory for long term or temporary storage of print data and job identifiers are well known in the art at the time of submission of the pending application. 3.) Corona incorporates Knott (US-PAT 5124731) by reference in his patent; Knott in Figure 2 discloses a disc 56 for storing data within controller section 2 of the given printing system. Therefore, Corona's patent includes a storage section which "receives and stores user identification information for identifying a user of a computer together with printing information from said printer."

With regards to claims 7 and 19, limitation 2, "a sheet counting section which prepares page information from said printing information," this limitation is met by the aforementioned job identifying banner as described in column 7, lines 38-44, "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." The reception of this job identifying banner data as disclosed in the previous paragraph carries out the same functionality of the "sheet counter"; to "prepare page information from said printing information."

Regarding claims 7 and 19, limitation 3, Corona discloses in figure 1 a control means 100, "for selecting which said sheet supply tray will feed copy sheets for a

selected job set," as claimed in claim 1. Furthermore, the controller functions to allow for reverse side printing. Corona discloses in column 10, lines 36-41, "if the job sets are being outputted and stacked facedown, another option is to alternatively or additionally print the banners 15a or 16a on their rear sides so that they will still be visible from the top of (facing up in) the stacking tray."

Corona does not expressly disclose printing user and page information on the back of each printed sheet, presumably because this would essentially double the printing time of a given duplex printer.

Microsoft Notepad, which shipped bundled with Microsoft Windows 95 on 8/24/95, prints the page number on each page discharged from the printer output port so that the page number corresponds with the order of the page in the program. This "feature" is also available as an option in several standard word processing or text editor programs, as the method of printing page numbers is well known in the art; the benefit of this feature is to provide the user with a quick and easy way to verify the number of pages printed without the use of a cover page, though the two are not mutually exclusive.

Corona and Microsoft Corporation Notepad are combinable because they both deal with static text representation in the field of printing.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include in Coronas system, which prints page and user information on the reverse side of banner sheets, a feature to print page and user information on the

back of each sheet of corresponding print data as taught by Microsoft Corporation's Notepad application.

The motivation of this modification would be to remove the use of banner pages altogether and allowing the user to easily identify the owner and length of documents output face down from a network printer.

Therefore it would have been obvious to combine Corona with Microsoft Corporation Notepad to obtain the invention as disclosed in claims 7 and 19. For the sake of clarity, this invention, which prints user and page information as originally contained in Corona's disclosed banner sheet 15 on the reverse side of each corresponding page of print information, shall herein be referred to in this office action as the "Corona/Microsoft combination."

In regards to claims 8 and 20, the Corona/Microsoft combination does not specifically disclose the controller interpreting settings sent by the user and stored in a setting section to determine whether or not to print user identification information. However, because Corona discloses a system with several different options and orientations for generating banner pages within a single image forming apparatus, it stands to reason that the user sets up these options in a user interface, which is transmitted to the controller 100, as was well known in the art at the time of submission. Furthermore, the patent by Knott (US-PAT 5124731), incorporated by reference in the Corona patent, discloses in figure 15 the operation of the SetCovers block 370 within the controller. Step 402 designates whether or not to print covers at all; these

instructions are received by the user through user interface 52 and stored on disk 56, thereby meeting the requirement of "a setting section which stores setting information for setting whether or not to print said page information and said user identification information received from said network." Furthermore, the controller 7 interprets these commands as shown in block 370 to output an image with covers as designated by the user input. Corona states in column 5, lines 54-58, "all references cited in this specification, and their references, are incorporated by reference herein where appropriate." Regarding a setting section, the print system of Corona/Microsoft incorporates a setcovers block for setting up the orientation and frequency of banner pages by reference. Therefore, "the controller section judges whether or not the page information and the user identification are to be printed on the back surface of the sheet based on the setting information stored in the setting section."

Regarding claims 12 and 24, which states "said controller section prints the page information and the user identification information on an edge of the sheet opposite to a sheet discharge port from which the sheet is discharged." Corona discloses in figure 1 a control means 100, "for selecting which said sheet supply tray will feed copy sheets for a selected job set," as claimed in claim 1. Furthermore, the controller functions to allow for reverse side printing. Corona discloses in column 10, lines 36-41, "if the job sets are being outputted and stacked facedown, another option is to alternatively or additionally print the banners 15a or 16a on their rear sides so that they will still be visible from the top of (facing up in) the stacking tray." Therefore, in the

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Corona/Microsoft combination, the page information and user identification is printed on the sheet side opposite to the sheet discharge port because the page information and user identification is printed on the reverse side of the page of the corresponding print information.

3. Claims 5, 6, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corona (US-PAT 5316279) in view of Microsoft Corporation Notepad, further in view of Fujita (US-PAT 6055361).

Corona's patented system and method is capable of printing page information on the back of a banner sheet to correctly identify a print job with its owner and other assorted information as disclosed in the rejection for claims 1 and 13. As disclosed in column 7, lines 38-44, the job identifying banner "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." The "number of pages" as disclosed by Corona can be broadly defined as either the current printed page, the total number of pages, or a form of current page / total pages in X/Y form as disclosed in the pending application. However, Corona does not explicitly state how this "page information" is "prepared;" his patent pertains to the physical mechanism behind the banner page printing system, not the algorithms for generating page or user information data.

Fujita discloses in paragraph (70), lines 10-15, a page counter 70, "when receiving such a notification, the page monitor progresses the page counter 70 by only

1." Thus, this operation qualifies as "addition in order of the discharged sheets." As it is well known in the art, to find the current page by addition is simply to increment by 1 as each page is discharged. Likewise, to find the remaining pages, the total is decremented by 1 as each page is discharged. Therefore, examiner contends that any inventor aware of the mathematical processes disclosed in claims 5 and 16 are also aware of the reverse operation as disclosed in 6 and 17.

Corona and Fujita are combinable because they are both from the field of printing and printer control.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include a page information preparation algorithm as taught by Fujita into the banner page printing system as disclosed by Corona.

The motivation of this modification would be to allow for a simple running count to be implemented for display to print users.

Thus it would have been obvious to combine Corona and Fujita to obtain the invention as disclosed in claims 5, 6, 16, and 17.

With regards to claims 10, 11, 22, and 23, the Corona/Microsoft combination as discussed is capable of printing page information on the back of each corresponding print data sheet to correctly identify each page of a print job with its owner and other assorted information as disclosed in the rejection for claims 7 and 19. As disclosed in column 7, lines 38-44, the job identifying banner "can include either or both a printer-user (job generator) identifier and a specific job identifier, such as the subject title and/or

date and/or job number of the document, and/or the number of pages, and/or the number of copy sets being made, etc." The "number of pages" as disclosed by Corona can be broadly defined as either the current printed page, the total number of pages, or a form of current page / total pages in X/Y form as disclosed in the pending application. However, Corona does not explicitly state how this "page information" is "prepared;" his patent pertains to the physical mechanism behind the banner page printing system, not the algorithms for generating page or user information data.

Fujita discloses in paragraph (70), lines 10-15, a page counter 70, "when receiving such a notification, the page monitor progresses the page counter 70 by only 1." Thus, this operation qualifies as "addition in order of the discharged sheets." As it is well known in the art, to find the current page by addition is simply to increment by 1 as each page is discharged. Likewise, to find the remaining pages, the total is decremented by 1 as each page is discharged. Therefore, examiner contends that any inventor aware of the mathematical processes disclosed in claims 10 and 22 are also aware of the reverse operation as disclosed in 11 and 23.

Corona, Microsoft, and Fujita are combinable because they are all from the field of printing and printer control.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include a page information preparation algorithm as taught by Fujita into the identification page printing system as taught by the aforementioned Corona/Microsoft combination.

The motivation of this modification would be to allow for a simple running count to be implemented for display to print users.

Thus it would have been obvious to combine Corona, Microsoft, and Fujita to obtain the invention as disclosed in claims 10, 11, 22, and 23.

With regards to claims 3, 9, 15, and 21, the Corona/Microsoft/Fujita combination meets the limitations of independent claims 1, 7, 13, and 19 by printing user data on the reverse side of each corresponding page of printing information as thoroughly described above. Additionally, the sheet counter section, embodied in the controller section, prepares page information by a simple addition by one for each page printed out of the printer or by a simple subtraction from the total number of pages for each page which comes from the printer. Thus, the page number is exactly the number of sheets which have been output from a printer, unlike in traditional duplex printing, wherein the page number is the number of pages output x 2. Therefore, the limitation, "said sheet counter section uses the number of printed sheets as a total pages number and prepares the page information, when the printing information is printed on both sides of the sheet."

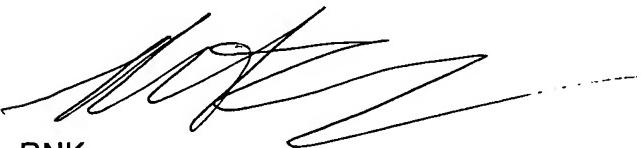
Conclusion

This action is NON-FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is 571-272-0593. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



RNK



TWYLER LAMB
SUPERVISORY PATENT EXAMINER